DOCUMENT RESUME

ED 118 669 UD 015 694

AUTHOR Fagan, Ora Simcha
TITLE Violent and Antisocial Behavior: A Longitudinal Study of Urban Youth.
INSTITUTION Office of Child Development (DHEW), Washington, D.C.
PUB DATE [75]
NOTE 59p.

EDRS PRICE MF-$0.83 HC-$3.50 Plus Postage
DESCRIPTORS *Anti Social Behavior; Behavior Patterns; Children; Community Agencies (Public); Family Characteristics; Field Interviews; *Longitudinal Studies; Mothers; *Predictive Measurement; Records (Forms); Social Characteristics; Surveys; *Urban Youth; Violence
IDENTIFIERS *New York (New York)

ABSTRACT

THis study identifies the social, familial, and childhood characteristics which predict and explain the development of antisocial behavior. It also examines the extent to which violent antisocial behavior presents a distinct entity with its unique etiological processes. Several major studies which purportedly attempted to identify the causes and explain the development of antisocial behavior and/or its expression in criminal behavior were seen to be methodologically limited. This study is considered to overcome these difficulties in several ways. It is based on a random sample drawn from the community and representing a cross section of the population. Information was collected in a survey interview from all mothers. As indicated by a later search of records, with the exception of a small minority (two percent of the cases), this interview preceded the child's labeling as a 'delinquent'. This information includes both parental and child behavior. A follow-up interview provides a source of information on changes which took place and hence an opportunity to differentiate the outcome and correlates of antisocial behavior from its antecedents. Finally, antisocial and violent behavior were measured both on the basis of cumulative agency records and as reported by the mother at the time of the second interview. (Author/JM)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED118669
UD015694
UD 015 694

VIOLENT AND ANTISOCIAL BEHAVIOR: A LONGITUDINAL STUDY OF URBAN YOUTH

Progress Report to the Office of Child Development*

Grant #OCD-CB-480

Ora Simcha Pagan, D.S.W.,[3] Thomas S. Langner, Ph.D.,[2] Joanne C. Gersten, Ph.D.,[3] Jeanne G. Eisenberg, M.A.,[1]

From the Division of Epidemiology
Columbia University School of Public Health
600 West 168 Street
New York, New York 10032

[1]Senior Staff Associate in Epidemiology, Columbia University School of Public Health

[2]Professor of Epidemiology, Columbia University School of Public Health, and Principal Investigator

[3]Assistant Professor of Epidemiology, Columbia University School of Public Health

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

*This report is currently being prepared for publication.

TABLE OF CONTENTS

	Page
Introduction	2
Method	4
Sources of Data on Antisocial Behavior	5
Definition and Measurement of Antisocial Behavior	7
Discussion of Results	
A. Antisocial Behavior and the Social Matrix	11
(A) Officially Recorded Delinquency and Sociodemographic Background	17
(B) Delinquent Behavior and Sociodemographic Background	26
B. Structural and Behavioral Characteristics of the Family and Antisocial Behavior	33
C. Parent-Child Relationship and Antisocial Behavior	45
D. Childhood Antecedents of Antisocial Behavior	53
Appendix A. Supplementary Tables (Background Information on Sample)	56
Appendix B. Parental Factors, Parent-Child Relationship Factors and Child Behavior Factors	58

VIOLENT AND ANTISOCIAL BEHAVIOR:
A LONGITUDINAL STUDY OF URBAN YOUTH

Introduction

The purpose of this study is to identify the social, familial and childhood characteristics which predict and explain the development of antisocial behavior. It also examines the extent to which violent-antisocial behavior presents a distinct entity with its unique etiological processes.

While there have been several major studies which have attempted to identify the causes and explain the development of antisocial behavior and/or its expression in criminal behavior, these have been bound -- for varied reasons -- by methodological limitations which have precluded "explanation" in its forecasting, causal sense. A multitude of studies, the most known of which is the Gluecks' (1950) have compared known delinquents with their matched controls in terms of their social-physical-emotional development. The matching was done after delinquency had erupted and the social-emotional histories collected retrospectively. Such studies are faced with objective, methodological difficulties in determining which variables are antecedents of antisocial behavior, which are correlates that along with antisocial behavior are accounted for by a third variable, and which, in fact, are the outcome of the child's deviant behavior. An improvement over the retrospective and/or cross-sectional designs was achieved by Robins (1966) in that children from a Child Guidance Clinic, seen originally for a variety of reasons, were matched with their controls

on the basis of early school records. Subjects and controls were thus derived from the same population frame. Moreover, both groups were interviewed thirty years later and their "life long" cumulative records were assessed. Robins' work presents a major effort to tap childhood behavior which prognosticates later antisocial behavior. There are, however, several barriers in the design which preclude the possibility of identifying the causes leading to antisocial behavior. The information given by the mothers about their own and their childrens' behavior postdated the childrens' identification as "problems" by a treatment agency and/or the courts. Most importantly, information about parental behavior was available only for the clinic group, and that information was abstracted from the childrens' clinic records. It follows that the study could not include in its goals the identification of parental, familial variables or of early pre-treatment predictors of antisocial behavior. A study which stands out in that it followed both designated "delinquents" and non-delinquents is the follow-up study of the Cambridge-Somerville Youth Project (McCord and McCord, 1959, 1960). However, no systematic sampling procedures were employed and one is hard pressed in assessing the effect of self-selection. Furthermore, this study focuses on the effect of parent-child relationships and does not include information on early child behavior in explaining later criminal behavior.

The present study overcomes the above noted methodological difficulties in several important ways. It is based on a random

sample drawn from the community and representing a cross-section of the population. Information was systematically collected in a survey interview from all mothers. As indicated by a later search of records, with the exception of a small minority (2% of the cases), this interview preceded the child's labeling as a "delinquent". This information includes both parental and child behavior. A follow-up interview provides a source of information on changes which took place and hence an opportunity to differentiate the outcome and correlates of antisocial behavior from its antecedents. Finally, antisocial and violent behavior were measured both on the basis of cumulative agency records and as reported by the mother at the time of the second interview. It is therefore hoped that this and following analyses will indeed provide generalizable information on the major factors and processes which explain the development of antisocial and violent behavior.

Method

Sample

The original sample comprised a probability sample of 1034 children aged 6 to 18 selected from a cross-section of Manhattan households between 125th and Houston Streets. At Time I, from each health area, designated by the city, a cluster of eight dwelling units was randomly selected, and every thirtieth cluster thereafter in the health area was selected. All eligible families (i.e. those with a child 6 to 18 years of age) in a cluster were then emmerated, and a selection pattern was assigned to a cluster that gave children across clusters

an equal probability of selection. This stratified systematic cluster sampling plan resulted in a sample that was 56% White, 14% black, 29% Spanish-speaking, and 1% other. Each age group except the oldest comprised nearly one-thirteenth of the sample, and males and females were fairly evenly distributed across the age groups. At Time II, on the average five years later, the sample was followed up. The follow-up was conducted in such a manner as to retain the ethnic proportions of the Year I sample. This rule set a lower boundary since some of the Spanish-speaking families had moved out of the City and could not be located. A total of 732 families or 71% of the original sample constituted the follow-up sample. The follow-up sample did not significantly differ from the original sample in terms of age, sex, demographic characteristics or scores on the parental and marital dimensions. It therefore represents a random subsample of the original cross-sectional, probability sample. The most relevant demographic characteristics of this sample are presented in Appendix B in terms of their joint bivariate distribution. The following analysis examines violent and antisocial behavior in this sample.

Sources of Data on Antisocial Behavior

The mothers at both the first and the second interviews were questioned in much detail about their childrens' behavior. As will be seen later, the childrens' violent and delinquent behavior as reported at the time of the second interview was used in constructing the relevant behavioral inventories. However, inasmuch as we were

interested in tapping the full spectrum and severity of antisocial behavior and in order to examine the explanatory power of our predictor variables against an external criterion variable, we have also embarked on an extensive search of school and of officially recorded antisocial behavior of the children in the sample.

The child's overt aggressive behavior at school as well as his lack of self-control and problems in accepting authority were abstracted from continuous school records. While not processed mechanically at this time, this information will be included in future analyses of antisocial behavior.

In addition, information on officially recorded delinquent/criminal behavior was collected through a search of the files of Special Services for Children, Family Court and the Police Department. The records searched cover a period of over twenty years and hence provide a complete cumulative "record" of law violations as well as early contacts arising from the need for protective services. In classifying information from these agencies a clear distinction was made between applications for social-psychological services (unrelated to law violations), children's records attributed to parental neglect and/or abuse, and records associated with the child's law-violating behavior. The classification of law-violating behavior does not derive from the legal charge (although such charges were also coded); rather, the behavior exhibited is classified in terms of its substantive components, namely, degree and type of violence used, threat of violence, harm inflicted, weapon used, type and degree of aggression

against property, nature and value of theft, juvenile-status violations, violations of city law, sexual violations, alcohol abuse, gambling, type of drug abused. The onset and frequency of delinquent activity as well as their sequence are also taken into account.

Definition and Measurement of Antisocial Behavior

Interpreting diagnostic language into functional terms Robins describes "Antisocial Personality" as "a pattern of recurrent and persistent conflict with socially prescribed patterns of behavior in a wide variety of areas -- trouble with the law, with friends and relatives, on the job, excessive drinking and drug taking."* Diagnostically, the term "persistent" serves to imply that the person repeats such behavior, gaining no self correction from previous sanctions. It also, however, leaves room for the supposition that only such people who are "persistent" in their antisocial behavior and who also present a cluster of personality characteristics (among them, suspiciousness, hostility, irresponsibility, paranoid thinking, irritability, tension) should be properly regarded as "antisocial personality".

For the purposes of the present investigation antisocial behavior is defined as recurrent violation of socially prescribed patterns of behavior. No equivalence with a psychiatric diagnostic entity is

* L.N. Robins, "Social Correlates of Antisocial Personality", (p. 1) Paper presented at the Annual Meeting of the American Sociological Association, New Orleans, August, 1972, mimeo.

assumed at this stage of our investigation. Instead, both antisocial and violent behavior are defined by reference to a delimited set of behaviors and conceptualized on a continuum of severity. Since the subjects studied (longitudinally) presently range from adolescence to young adulthood, antisocial behavior was operationalized by reference to the following behaviors: defiance of parental and other authority, stealing, truancy, expulsion from high school, premarital pregnancy, run-away, excessive drinking of alcohol, abuse of marijuana and of other drugs, unabated-pathological lying. Violent behavior is defined as overt aggression which results in the destruction of property or in injury to persons. The questionnaire items included in the inventories of antisocial and of violent behavior are presented below. The items in each of the inventories have been standardized. The reliability of these measures has been assessed [$r_{kk} = \frac{k}{k-1}\left(1 - \frac{\Sigma \sigma_i^2}{\sigma_y^2}\right)$ where k = number of items in the scale. y = total scale]* and is satisfactory: violence scale r_{kk} = .84, antisocial behavior scale r_{kk} = .79. While at a later stage, several steps might be used to further increase the reliability, for the purposes of the foregoing analysis reliability is satisfactory and measurement error does not present an obstacle for interpretation.

---

* Jum C. Nunnally, Psychometric Theory (McGraw-Hill, New York, 1967) pp. 226-227.

Inventory of Antisocial Behavior

1. Refuses when directed by father. (Always and/or often; obeys resentfully; obeys neutrally; obeys willingly.)

2. Refuses when directed by mother. (Always and/or often; obeys resentfully; obeys neutrally; obeys willingly.)

3. During last 5 years taken sums of money that did not belong to him (her). (Dichotomized)

4. During last 5 years taken things that did not belong to him other than money. (Dichotomized)

5. Teacher complains about child's absences. (Dichotomized)

6. Has been expelled from school. (Dichotomy)

7. Quit school. (Dichotomy)

8. Days missed from school last year. (Over 30, between 10 - 30, under 10).

9. Premarital pregnancy. (Boys responsible for premarital pregnancy)

10. Lies so much that cannot believe anything he says. (Dichotomized)

11. Plays hooky. (often; sometimes; never)

12. Ran away. (Dichotomized)

13. Drinks alcoholic beverages too much. (Dichotomized)

14. Smokes Marijuana. (Currently; in past; never)

15. Takes drugs other than Marijuana. (Currently, in past, never)

Inventory of Violent Behavior

1. When loses temper usually throws, breaks, kicks, slams or destroys things. (Dichotomy)

2. When loses temper strikes or hits other people. (Dichotomy)

3. During last 5 years hit: mother, father, teacher, friend, other (non-sibling). (Cumulative score)

4. Person hit was hurt badly enough to need bandages. (Dichotomy)

5. Tease, picks on or bully other children. (Dichotomy)

6. Starts fights with others. (Dichotomized)

7. Fights physically with mother. (Dichotomized)

8. Fights physically with father. (Dichotomized)

9. Fights physically with others -- not siblings. (Dichotomized)

10. Aggressive behavior described as a major problem (by mother) during last five years. (Dichotomy)

11. Cruel to other children. (Dichotomy)

12. Set fires in last 5 years. (Dichotomy)

13. Broken windows, or destroyed property during last 5 years.

Officially recorded information (i.e. Police department, Family Court, Special Services for Children) has been coded in detail. After excluding all events which do not represent juvenile-status and/or adult law violations a dichotomous variable -- Delinquent-Criminal record versus no Delinquent-Criminal record -- was established.

DISCUSSION OF RESULTS

ANTISOCIAL BEHAVIOR AND THE SOCIAL MATRIX

Leading sociological theories of deviant-antisocial behavior vary considerably in their conceptual explanatory frameworks. Strain (or "anomie") theories explain deviant behavior as resulting from discrepancies between culturally induced goals and the socially structured means of achieving them.[1] A.K. Cohen, in his social-psychological theory, views the "delinquent solution" as a "Reaction formation,... 'an irrational'... 'unaccountable' hostility to the enemy within... as well as without: the norms of the respectable middle-class..."[1a] Subculture or "cultural deviance" theories propose that delinquent-antisocial behavior represents conformity with a set of roles and standards postively valued within certain segments of the society.[2] While the dynamics employed in explaining delinquent-antisocial behavior differ among the above theories, they all identify and, indeed, focus upon explaining the concentration of delinquent behavior in the lower social strata.

---

1. R.K. Merton, Social Theory and Social Structure (New York: The Free Press, 1957), pp. 131-160; R.A. Cloward and L.E. Ohlin, Delinquency and Opportunity (New York: The Free Press, 1960).

1[a] A.K. Cohen, Delinquent Boys: The Culture of the Gang (Glencoe, Ill.: Free Press, 1955), p. 133.

2. See A.K. Cohen, ed., The Sutherland Papers (Bloomington: Indiana Univ. Press, 1956): Walter B. Miller, "Lower Class Culture as a Generating Milieu of Gang Delinquency," Journal of Social Issues, XXIV (1958), 5-19.

The association between class membership and delinquent behavior draws support from a great many empirical studies utilizing official data. Indeed, more than three decades ago Warner and associates in their studies of social class observed that the two lower classes accounted for approximately 99 percent of those arrested in Yankee City, while the two upper classes accounted for less than three quarters of 1 percent. C.R. Shaw and H. McKay analyzed data from Chicago and 21 other large cities in the United States during the 1920's and 1930's. Their data indicate the preponderance of delinquency in lower class transient neighborhoods.[3] More recently, in a study which covers a complete age cohort, Wolfgang, Figlio and Sellin report a twofold offender rate for lower SES non-White boys as compared with higher SES White boys.[4]

The data reflected in crime reporting and the theories which dominated the field of delinquency for a number of decades have thus been mutually supportive. So much so that the association between widespread antisocial behavior and low social status became an accepted truism and investigators searching for the causes of criminal behavior tended to examine the relative importance of traits (broken

---

3. C.R. Shaw and H.D. McKay, Juvenile Delinquency and Urban Areas (University of Chicago Press, 1942).

4. M.E. Wolfgang, R.M. Figlio and T. Sellin, Delinquency in a Birth Cohort (University of Chicago Press, 1972).

homes, large number of children, absent fathers, etc.) characteristic of the lower class.[5]

As research on delinquency expanded, however, dissatisfaction with official records as the basic datum grew stronger. While it is clear that official data, particularly that which pertains to known offenders, do not cover the phenomenon under study, there are no ways to estimate the extent to which it does or does not underestimate it, or the direction in which it biases its representation. Moreover, various researchers have observed that the treatment of delinquent-antisocial behavior as a dichotomous attribute [i.e., delinquent vs. nondelinquent or institutionalized vs. noninstitutionalized] presents an over-simplification and bears little validity. Such behavior, it is suggested, varies in degree and should be conceptualized along one or more continua.[6] Following this approach, several researchers have constructed instruments which are not dependent on the legal code and which were used in direct interviewing or as a part of an anonymous

---

5. W. McCord and J. McCord, Origins of Crime (New York Columbia Univ. Press, 1959); William C. Kvaraceus and W. Miller, Delinquent Behavior (Washington, D.C., National Educational Association, 1959) Vol. 1. pp. 55-75.

6. A good example of this approach is presented in J. Short, "The Sociocultural Context of Delinquency," Crime and Delinquency, 365 (1960) p. 366.

questionnaire.[7] For the most part they demonstrate that the relation between socioeconomic status and delinquent behavior, as measured by these instruments, is very small or nonexistent.[8] Moreover, the small relation identified between class membership and delinquent activity does not consistently follow the expected inverse function.[9]

---

7. The most widely used scale was constructed by F.I. Nye and J.F. Short, Jr., "Scaling Delinquent Behavior," American Sociological Review, XXII (1957), 328. Another scale which has been given considerable attention was presented in F.A. Dentler and L.J. Monroe, "Social Correlates of Early Adolescent Theft," American Sociological Review, XXVI (1961), 733-743.

8. T. Hirschi, Causes of Delinquency (Berkeley; Univ. of California Press, 1969); F.I. Nye, J.F. Short and V.J. Olson "Socioeconomic Status and Delinquent Behavior," American Journal of Sociology, IXIII (1958); 388; M.L. Erickson and L.T. Empey, "Court Records, Undetected Delinquency and Decision-Making," Journal of Criminal Law, Criminology and Police Science, 54 (1963), p. 456.

9. For an example of a study which reports a positive relation (i.e. greater delinquency in the upper classes) see H.L. Voss, "Socio-economic Status and Reported Delinquent Behavior," Social Problems, 13 (1966), pp. 314-324. An inverse relation has been reported among others by A.J. Reiss, Jr. and A.L. Rhodes, "The distribution of Juvenile Delinquency in the Social Class Structure," American Sociological Review, 26 (1961), pp. 721-732.

The fact that findings from self-report studies of delinquent behavior do not verify the class differential so capitalized upon by "classical" theories of delinquency raises some important issues. Yet, there are certain methodological problems which need to be overcome and which indeed leave even some of those researchers who utilize self-reported information somewhat uneasy about the conclusiveness and the comparability of their findings. Most importantly, self-report studies have been typically based on in-school samples and have been carried out in small towns or cities. They may therefore have minimized both class and delinquency differentials[10] and possibly missed altogether the groups to which theorists allude and which are also of particular concern to the planners of services. Self-report instruments are also, expectedly, heavily composed of items which reflect relatively minor and/or juvenile status type law violations and do not run the gamut of severe crimes against person or property. In so doing, they give relatively greater weight to minor infractions.

Given the conflicting findings on the relationship of socio-demographic variables to delinquent-antisocial behavior and the centrality which these variables occupy in delinquency theories, it is important to further probe this issue. In view of the restricted samples used in previous "self-report" studies it is particularly

---

10. T. Hirschi; Op.cit., p. 81.

interesting to examine both official and survey data in a random cross-sectional sample of urban youth.

The social-demographic variables included in the following analysis are: income level; rent; number of addresses (or moves) within the City; mother's education; number of children in the family; and ethnic-racial group. The relationship of these independent variables to the acquisition of a delinquent and/or adult criminal record was examined 1) for the study children (i.e., the index child in each family N=732); 2) for all of the children in each family. To the extent that such familial demographic variables are significantly associated with criminal record, the results pertaining to the sample of study children and those which also take their siblings into account should be completely congruent; indeed, the latter should further accentuate the relationship.

It should be noted that while some of these variables are inherently unchangeable, others, such as income level or number of addresses, may change differentially over time. In congruence with the attempt to examine the strength of these variables as predictors, Time I measures (derived in the first interview) of these demographic variables were related to the acquisition of an official record in the following 10 year period.

Later, the relationship between these demographic variables and the child's antisocial, violent behavior as reported by the mother will be examined.

(A.) Officially Recorded Delinquency and Socio-demographic Background

Tables A 1 through A 5 display a strong and consistent relationship between each of the sociodemographic variables and the acquisition of an "official" delinquent/criminal record.

Table A 1

Percentage of Study Children with

Delinquent/Criminal Records at Family Income Levels

Income*	No Delinquent/ Criminal Record	Delinquent/ Criminal Record	N
Poverty (Under 4000)	70.7	29.3	123
Lower Income (4000 - 7800)	83.7	16.3	276
Middle Income (7800 - 10,500)	87.8	12.2	90
Upper Middle Income (10,500 - 15,500)	94.9	5.1	78
High Income (Over 15,500)	99.4	0.6	165

$X^2 = 57.19$ d.f. = 4 $p < .0001$

* Family Income in 1965-67

The same relationship is observed when income and delinquent-record are examined within each sex group separately. Furthermore, the relationship of family income and delinquent-criminal record holds equally well when all of the children in these families are taken into account.**

** An examination of rent levels reveals an identical pattern.

Table A 2

Percentage of Study Children with

Delinquent/Criminal Records by Number of Addresses

Number of Addresses	No Delinquent/ Criminal Record	Delinquent/Criminal Record	N
1	89.0	11.0	245
2	90.7	9.3	257
3	86.4	13.6	147
4+	68.7	31.3	83

$X^2 = 28.0$ d.f. = 3 $p < .0001$

When all children in the family are considered, the X^2 is similarly significant at the .0001 level. Both distributions seem to indicate a sharp increase in official delinquency in the multiple address category (four or more) as compared to the rest. However, when boys and girls are examined separately, this pattern holds only for the boys, while the girls exhibit a progressive incremental increase closely corresponding to the residential moves.

While the above sociodemographic variables present relatively direct measures of socialeconomic position, mother's level of education can be viewed as an indicator of class membership in its cultural meaning. As indicated in the following table, mother's educational background is closely associated with later acquisition of delinquent records by children.

Table A 3

Percentage of Study Children with
Delinquent/Criminal Record by
Mother's Educational Background

Mother's Education	No Delinquent/ Criminal Record	Delinquent/ Criminal Record	N
Low (Up to 8 years)	77.1	22.9	179
Medium (High School and/or Trade School)	85.8	14.2	339
High (College)	96.3	3.7	97

$X^2 = 31.6$ d.f. = 2 $p < .0001$

Similarly, mother's education and children's official records are highly interrelated when all of the family's children are taken into account.

Number of children in the family, or family size, is a measure which reflects the association between class membership and certain qualitative structural characteristics of the family. Table A 4 indicates the existence of a relationship between the number of children in a family and the acquisition of an "official" record by study children.

Table A 4

Percentage of Study Children with

Delinquent/Criminal Record by Family Size

Number of Children in Family	No Delinquent/ Criminal Record	Delinquent/ Criminal Record	N
1	85.7	14.3	133
2	91.3	8.7	264
3/4	88.0	12.0	242
5 or more	72.0	28.0	93

$X^2 = 22.68$ d.f. = 3 $p < .0001$

The above table presents a certain reversal, that is, a higher proportion of official delinquency for only children as compared with children from families of two or three children. In this instance, it is particularly instructive to examine the data on boys and girls separately, as well as data concerning all the children in the family. Examination of the pertinent data within sex groups indicates that girls who are only children have a particularly high proportion of official delinquency rivaled only by that of girls from large families (five or more). Boys who are only children have a rate comparable to that of boys from families with two, three or four children. Boys from large families (five or more) present the highest proportion -- two and one-half times their expected share of official delinquents. The fact that single children seem to stand out in a fashion somewhat

unrelated to family size calls for further probing. While some studies have isolated only children as "behavior problems", in general, previous studies have identified a positive relationship between number of children and delinquency and have attributed it to variability in supervision. Somewhat anticipating further analysis, it should be stated that in this sample only White children exhibit the expected linear relationship between number of children and delinquent record. Members of minority groups, particularly those typically characterized by a large number of children (e.g., Spanish) have a high offender rate for only children. It is therefore suggested that the relationship between number of children in the family and the acquisition of a delinquent record be interpreted as due to the association of the former with class-membership as well as to a quality of disorganization or "unsettleness" of the family reflected in single-child households in certain subcultures.

Earlier studies, most notably, Wolfgang et al.(1972) have reported a higher rate of known offenders among non-Whites as compared to Whites. These rates have been generally reported for boys or males and for populations where primarily the non-White/White differentiation is applicable. The following Table A 5 clearly indicates the large differences in the proportion of known offenders among the relevant ethnic-racial groups.

Table A 5

Percentage of Study Children with
Delinquent/Criminal Records by Ethnic Groups

	No Delinquent/ Criminal Record	Delinquent/Criminal Record	N
White	93.6	6.4	440
Black	65.3	34.7	95
Spanish	81.7	18.3	197

$X^2 = 60.6$ d.f. = 2 $p < .0001$

When the data are examined within sex groups the above pattern is roughly replicated for males (percent with delinquent-criminal record: White 11.1; Black 55.6; Spanish 25.5 -- total N=376). In the case of females however the gap between the White group and the other two is larger (percent with delinquent/criminal record: White 1.4; Black 16.0; Spanish 9.9 -- total N=356). In considering all children in the family the proportions are basically maintained (White 11.6; Black 55.6; and Spanish 32.0 - total N=732).

***

When examined separately, each of the above variables relates significantly to the acquisition of a criminal record. As expected, however, these sociodemographic characteristics (see Appendix A) are not distributed independently of one another. It is therefore necessary to clarify which of the above variables is indeed causally related to the acquisition of a crime record and which only spuriously related due to intercorrelations among the independent variables. Furthermore, interactions among these variables may be expected, such

that the introduction of a control will change the relationship in various cells to varying degrees.

Of the above demographic variables, the two which carry most weight in terms of earlier research and which are also most interrelated among themselves (contingency coefficient .52) are Racial-Ethnic group and Income. It is important to know to what extent they are redundant or in which way they interact in explaining officially recognized delinquency/criminality. As indicated in Table A6, within income levels the Spanish and White children have similar rates of known delinquency. The Blacks, however, maintain a considerably higher rate even within comparable income levels.

Table A 6

Percentage of Study Children with Delinquent/Criminal Records for Racial-Ethnic Groups Within Income Levels

	Poverty (1)	Low Income (2)	Middle Income (3)	Upper Middle Income (4)	High Income (5)	N
White	20.0	12.1	10.2	4.2	0.0	440
Black	39.5	35.1	23.1	20.0	50.0	95
Spanish	25.7	15.0	11.1	0.0	-	197
	N=123	N=276	N=90	N=78	N=165	

For Income level (1) $X^2 = 2.9$ d.f. = 2 N.S.

For income level (2) $X^2 = 11.4$ d.f. = 2 $p < .003$

Because of low cell frequencies of the Black and Spanish groups in the three uppermost categories of income, a significance test could not be performed for those income levels. It is interesting to note that while the trend is consistent the relationship between ethnic group membership and official delinquency-criminality is the weakest on the lowest income level.

Inasmuch as ethnic group differences are not eliminated by controlling for income level, it is necessary to examine the extent to which ethnic-group membership, particularly insofar as members of the Black group are concerned, "explains away" the effect of other demographic variables. When the data are examined within racial-ethnic groups, income level and the acquisition of a delinquent/criminal record are significantly associated in the White group, less so for the Spanish and not at all for the Black group.[11] When the

---

11. The lack of a significant relationship between income level and the acquisition of a record in certain groups was further examined for internal replication. The results were summarized in Table A 7.

Table A 7

Significance of Relationship between Income Level and Delinquent/Criminal Record within Ethnic-Racial Groups

	Study Children (N=732)	Study Child and Siblings (N = 732 Families)	Boys (Study children only) (N = 376)	Girls (Study children only) (N = 356)
White	$p < .0001$	$p < .0001$	$p < .0001$	$p < .0001$
Black	N.S.	N.S.	N.S.	N.S.
Spanish	$p < .06$	$p < .01$	N.S.	$p < .01$

other independent variables of a sociodemographic nature are examined the same pattern is further substantiated (See Table A 8).

Table A 8

Significance of Relationship between

Four Sociodemographic Measures and

Delinquent/Criminal Record within Racial-Ethnic Groups

	Income (1 - 5)	Number of Residential Moves (1, 2, 3, 4+)	Mother's Education (1,2,3)	Number of Children in Family (1, 2, 3-4, 5+)
White	$p < .0001$	N.S.	$p < .0007$	N.S.
Black	N.S.	N.S.	N.S.	N.S.
Spanish	$p < .06$	$p < .002$	N.S.	$p < .01$

Within the Black group none of the demographic variables are significantly related to the acquisition of a criminal record. For the Whites the relationship is particularly strong for income and mother's education; it does not reach significance for number of residential moves or number of children(when number of children born by Time 2 is used the relationship is significant). Within the Spanish group, basically all the relevant measures are significantly related to the acquisition of record; the Spanish mothers have the lowest and least varied level of education.

In sum, these data strongly support Wolfgang et al. (1972) in isolating racial-ethnic group membership as the strongest correlate of delinquent-criminal record.[12] However, in as much as we were not

---

12. Wolfgang et al., op.cit., pp. 53-64.

interested in the social distribution per se but in the extent to which these social characteristics "explain" official delinquency we went on to isolate their effect. It was then determined that the effect of certain social-economic characteristics varied among the different racial-ethnic groups involved.

(B.) Delinquent Behavior and Sociodemographic Background

Information from the Time I interview concerning the above sociodemographic measures was also examined for its relationship to delinquent behavior as reported by the mother five years later. The relationship between sociodemographic characteristics and survey-reported delinquent behavior is considerably weaker and more complex than that described above for "officially" known criminality. Nevertheless, unlike the findings presented by some previous studies,[13] a discernible pattern associating social characteristics with delinquent behavior is identified.

It is unlikely that this discrepancy in findings is due to the fact that the information analyzed here was reported by mothers while the studies alluded to used information reported by the adolescents themselves. Overall, mothers can be expected to be less aware of delinquent activity than the adolescents or young adults themselves;

13. F.I. Nye, Family Relationships and Delinquent Behavior (New York: Wiley, 1958), pp. 23-34; T. Hirschi, Causes of Delinquency (Berkeley: Univ. of Calif. Press, 1969), pp. 66-81.

yet there is no reason to expect that an ethnically differential response bias accounts for the observed relationship. Moreover, in reporting violent behavior, which is equally normatively sanctioned, it is the White and the more educated mothers who report more violent behavior on the part of their children.

In the following paragraphs the relationship between each of the above noted demographic characteristics, and the ratings on the inventory of delinquent behavior, is reviewed.

Table A 9

Percentage of Study Children at Different Categories of Delinquent Behavior by Family Income

	Delinquent Behavior*					
Income	No Delinquent Behavior (1)	Low (2)	Moderate (3)	Moderately High (4)	Most Delinquent (5)	N
Poverty (under 4000)	30.1	33.3	18.7	8.1	9.8	123
Lower Income (4000-7800)	35.9	31.9	15.2	8.0	9.1	276
Middle Income (7800-10,500)	31.1	42.2	16.7	3.3	6.7	90
Upper Middle Income (10,500-15,500)	26.9	28.2	19.2	19.2	6.4	78
High Income (Over 15,500)	18.8	38.8	23.0	13.3	6.1	165
	N = 216	N = 253	N = 133	N = 72	N = 58	

$X^2 = 34.4$ d.f. = 16 $p < .004$

* The categories presented cover the distribution as follows: (1) includes all of those with no delinquent behavior; (2) those with a score half a s.d. below the mean; (3) up to half a s.d. above the mean; (4) more than half but up to one s.d. above the mean; (5) more than one s.d. above the mean.

The above joint bivariate distribution differs significantly from chance but the relationship observed is relatively complex. Overall the distribution is U shaped with the middle income children having the least delinquency and the upper income children presenting more delinquency than those from lower income families. In the "most delinquent" category, however, the lower income children exceed those from middle and upper income families.

The relationship between racial-ethnic group membership and delinquent behavior presented in Table A 10 is stronger and more consistent, for the various levels of delinquency, than the set described above. It is worth noting, however, that the difference among the groups is particularly discernible for the extreme delinquent categories. A prominent characteristic of the relationship presented below is the relatively low level of delinquency reported for the Spanish children. Inasmuch as the Spanish children have a rate of "official" delinquency considerably higher than the

Table A 10

Percentage of Study Children at Categories of Delinquent Behavior by Racial Ethnic-Group

Racial Ethnic Group	Delinquent Behavior: No Delinquent Behavior (1)	Low (2)	Moderate (3)	Moderately High (4)	Most Delinquent (5)	N
White	27.5	35.0	20.2	10.7	6.6	440
Black	22.1	28.4	20.0	12.6	16.8	95
Spanish	37.6	36.5	12.7	6.6	6.6	197

$X^2 = 26.6$ d.f. = 8 $p < .0009$

Whites, this group presents the largest discrepancy between self-reported and officially recorded delinquency.

Number of residential moves appears to be associated with differences between low and moderate levels of delinquency. For the overall sample, however, the relationship falls short of significance on an acceptable level ($p = .07$). As will be seen later, residential moves do significantly effect the level of delinquent behavior in certain subgroups.

Mother's level of education shows a pattern of relationship similar to that presented for income. That is, mothers with low education have a greater proportion of "most delinquent" children; however, mothers with high education have a greater proportion of children with moderate to moderately high levels of delinquency. The relationship, however, is significant only on the .08 level.

***

Both racial-ethnic group membership and income level are significantly related to delinquent behavior as reported in the survey. In this instance, too, we are interested in isolating the effect of each. Table A 11 presents the "Most Delinquent" category for each income level.

Table A 11

Percent of "Most Delinquent" Children for

Each Racial-Ethnic Group within Income Levels

	Income Level					
	(1) (Under 4000)	(2) (4000-7800)	(3) (7800-10,500)	(4) (10,500-15,500)	(5) (Over 15,500)	N
White	6.7	9.1	6.8	5.6	4.9	440
Black	13.2	18.9	7.7	20.0	100.0	95
Spanish	8.6	5.6	5.6	0.0	-	197
	N=123	N=276	N=90	N=78	N=165	

For Income level (1) $X^2=9.7$ d.f.=8 p = N.S.

For Income level (2) $X^2=19.0$ d.f.=8 $p < .01$

(Test of significance performed on the total distribution of delinquent behavior involving 5 levels of intensity).

The association between ethnic group membership and delinquent behavior even after the effect of income level is removed is evident in the above table. However, because of low cell frequencies of the Black and Spanish groups in the three upper most categories of income, a significance test could not be performed for those income levels. Interestingly, while the trend is similar, the relationship between ethnic group membership and delinquency does not reach significance on the lowest income level. While somewhat limited because of methodological considerations, the above table clearly indicates that the removal of income level as a determinant of delinquent behavior in no way eradicates racial-ethnic group differences.

A complementary workup was done to see whether, indeed, racial-ethnic group membership is so dominant a factor as to "wash out" the effect of any or all of the other sociodemographic variab[illegible] Table A 12 briefly summarizes the relationship of each of the relevant demographic variables to delinquent behavior within racial-ethnic groups.

Table A 12

Significance of Relationship between Four Sociodemographic Measures and Delinquent Behavior within Racial-Ethnic Groups

	Income (1-5)	Number of Residential Moves (1,2,3,4+)	Mother's Education (1,2,3)	Number of Children in Family (1,2,3-4,5+)
White	$p < .006$	$p < .02$	n.s.	n.s.
Black	n.s.	n.s.	n.s.	n.s.
Spanish	n.s.	$p < .05$	n.s.	$p < .01$

The information across the four demographic measures further substantiates the observation that for Blacks racial-ethnic group membership overshadows the differences in socioeconomic and other demographic measures. Not so for Whites or Spanish in which cases these variables do contribute to the explanation of delinquency.[14]

---

14. It should be noted that the Blacks present a wider range of income levels and mother's education than the Spanish. They are approximately equally distributed in terms of family size. The Spanish do present a wider range in residential moves.

The pattern which evolves in terms of the relationship between sociodemographic measures and delinquent behavior is, overall, similar to that described above for "official" delinquent-criminal records. In both cases racial-ethnic group membership plays a dominant role and the interaction between racial-ethnic group and other demographic variables is alike. Notably, however, Black middle-income children whose rate of Mother reported delinquent behavior is comparable to that of their White and Spanish class counterparts have a relatively higher rate of publically known delinquency.

Although some earlier studies of self-reported delinquency have alluded to differences between Whites and Non-Whites, overall they propose that self-reported delinquency as opposed to "official" delinquency is unrelated to sociodemographic characteristics. The analysis presented above suggests that sociodemographic variables are significantly associated with survey reported delinquent behavior. It further helps in distinguishing those characteristics which predict both self-reported and official delinquency from those which reveal a gap. How much of the discrepancy among these predictors should be accounted for by the mother's (uninformed) report and to what extent it reveals differential ethnic treatment by the agencies will be better assessed after the nature of the official delinquent behavior will be examined and taken into account.

STRUCTURAL AND BEHAVIORAL CHARACTERISTICS OF THE FAMILY AND ANTISOCIAL BEHAVIOR

Structural and interpersonal characteristics of the family as a unit, most notably, broken homes, absent fathers, mother's employment, number of children, cohesiveness of the family and parental quarreling have received a great deal of attention in delinquency research. Two prominent conceptual themes underlie the interpretation of their relationship to delinquent behavior. One emphasizes the importance of normative controls and their internalization. Following this view, parental supervision and its relationship to stability of the family union, number of children in the family, mother's employment outside the home and cohesiveness of the family become focal predictive measures of delinquent behavior.[15] A second conceptual theme relies more on the emotional atmosphere and the quality of modeling. According to this view broken homes, for example, are not in and of themselves etiologically important; rather, they present a symptom associated

---

15. While "control theory" took a more conceptual form in F.I. Nye, Family Relationships and Delinquent Behavior (Wiley: New York, 1958), the Gluecks in their pioneering study had already put much emphasis on this issue. Indeed, supervision and cohesiveness of family are two of the five items on their predictive table. See Sheldon Glueck and Eleanor Glueck, Unraveling Juvenile Delinquency (Cambridge; Harvard University Press, 1950), pp. 112-115.

with or a variant of poor family relationships. The researchers involved provide for a comparison between broken homes and quarrelsome but intact families. Their results generally indicate that broken and quarrelsome families are similarly associated with criminal behavior and properly treated as of a kind. Quarrelsome families, however, seem to have a greater immediate disruptive effect as compared to broken families.[16] Whether structural or interpersonal characteristics of the family are brought into focus (or a combination thereof) the emphasis is always on the effect of intrafamilial processes.

Some studies, while putting less emphasis on the family as a system of reciprocal interaction, examine carefully the role of the parents. Most attention has been paid to the adverse effect of antisocial fathers. Robins (1964) suggests that father's antisocial behavior is indeed a dominant factor and when controlled for, other social class-related differences considerably lose their importance as predictors of the child's future antisocial behavior. However, the author does not pursue the analysis to the point of interpreting or accounting for this relationship. Is it due to the extent of frustration suffered by the children? Is it the result of direct rein-

---

16. F.I. Nye, op cit., p. 46; W. and J. McCord, Origins of Crime (New York: Columbia University Press, 1959) differentiate the effect of broken vs. quarrelsome homes on juvenile vs. adult criminality. Broken homes, it is suggested, bear greater importance in terms of long term adult criminality.

forcement or of role modeling? Are there any other social psychological processes involved?

In the following analysis we will review twelve familial measures and their relationship to both publicly recorded and mother-reported delinquent behavior. These measures include structural characteristics of the family as well as a set of dimensions representing distinct aspects of the marital relationship and of the parents' physical-emotional health. Using this information the distinct and common predictors of publicly known and mother-reported delinquent behavior will be identified. It will then be possible to reassess the importance of familial variables and the dynamics through which they influence delinquent criminal behavior.

Children raised by both their natural parents have a considerably lower frequency of known delinquency/criminality than those brought up by one or neither of their natural parents. This relationship

Table B 1

Percentage of Study Children with Delinquent/Criminal Record by Number of Natural Parents in Household

	No Natural Parents	One Natural Parent	Both Natural Parents	N
No Delinquent Criminal Record	83.3	79.0	90.1	635
Delinquent Criminal Record	16.7	21.0	9.9	97
	N = 24	N = 205	N = 503	

$X^2 = 15.6$ $p < .001$

remains significant when, due to the small number in the "no natural parents" group, a dichotomy is assumed between those raised by both parents and those raised by one or none, Natural mothers' report of their children's behavior substantiates the relationship reflected in agency data. In the case of children in the "no natural parents" group, the female guardian reported less delinquency on the part of their children as compared with their representation in agency data. It is possible that such guardians (including adoptive parents) are relatively more reluctant to recognize and report their children's delinquent behavior. Nevertheless, when a dichotomy is assumed between children

Table B 2

Percentage of Children at Different Categories of Delinquent Behavior by Natural Parents

	No Natural Parents	One Natural Parent	Both Natural Parents	N
Delinquent Behavior				
None	45.8	24.9	30.6	216
Low	37.5	27.8	37.2	253
Moderate	0.0	23.4	16.4	133
Moderately High	12.5	12.2	8.7	72
Most Delinquent	4.2	11.7	6.6	58
	N = 24	N = 205	N = 503	

$X^2 = 22.7$ d.f. = 8 $p < .003$

brought up by both parents and the others the relationship as reflected in survey data remains significant $X^2 = 10.9$ $p < .02$.

The above relationship is congruent with previous findings from both studies of publicly recorded and of self-reported delinquency. It should be noted that in this sample 22.3% of the White children, 41% of the Spanish and 52.6% of the Black children were brought up without one or both natural parents.

If presence of both natural parents and family stability are inherently of importance, their effect should be similarly reflected in the various ethnic groups. This, however, is not the case. Table B 3 which summarizes the relationship for both agency recorded and survey reported behavior indicates that the Spanish children are most affected by the father's absence while the Blacks are the least affected. It is suggested that such variation among groups reflects differences in the role of the father and, moreover, in the sanctions associated with his absence in various groups.

Table B 3

Significance of Relationship between Number of Natural Parents in the Household and Delinquency by Ethnic-Racial Group

	Whites	Blacks	Spanish
Delinquent/Criminal Record	N.S.*	N.S.	$p < .03$
Delinquency as reported by mother	$p < .06$	N.S.	$p < .0$

* This relationship approaches significance. When other sibs are considered, the relationships reach the following levels: Whites $p < .02$; Blacks N.S.; Spanish $p < .007$.

Eight dimensions representing distinct aspects of the marital relationship as well as the parents' physical and emotional health, were examined for their relationship to the acquisition of a criminal record and to delinquent-antisocial behavior as reported in the survey. Scores on these factors were obtained for the time of the first and the second interview five years later. In this discussion we will focus on the relationship observed when Time I measures are used to predict later behavior. It is expected that the correlations with Time I measures will be weaker than those with Time II measures which reflect a more current view of the familial traits. However, these correlations throw light on the "signals" which forecast later antisocial behavior in its various forms. Where Time II measurement provides new information or deviates from the pattern observed with the Time I data, it will be noted.

Since the scores on these factors represent continuous variables, the Pearson product moment correlation was used to determine association and the t-test for a correlation to determine significance. Of the eight factors, one was not predictive of either survey reported or officially recorded delinquent behavior and was hence omitted from the table. While five factors are predictive of delinquent antisocial behavior as reported in the survey and three of delinquent/criminal record, only one -- unhappy marriage -- is simultaneously related to both on the level of first order correlations. When Time II measures are considered the overlap is somewhat greater in that the mother's emotional and physical health is also (inversely)correlated with delinquent/criminal record.

Table B 4

Correlations of Familial-Parental Factors with Delinquent, Violent Behavior and with Official Delinquent/Criminal Record

	A Isolated Parents	B Unhappy Marriage	C Mother's Physical & Emotional Health*	D Unleisurely Parents	E Parents Quarrels	F Husband Ill and Withdrawn	G Traditional Marriage *
Delinquent Behavior Scale	N.S.	r= .15 S.L. .001	r= .16 S.L. .001	N.S.	r = .13 S.L. .001	r = .13 S.L. .001	r = .11 S.L. .01
Violent Behavior Scale	N.S.	r= . 09 S.L. .01	r= .12 S.L. .001	N.S.	r = .19 S.L. .001	N.S.	r = .16 S.L. .001
Delinquent/ Criminal Record	r= .10 S.L..01	r = .16 S.L. .001	N.S.	r = .16 S.L. .001	N.S.	N.S.	N.S. (X^2 is Si nificant p< .0

* Correlation indicates an inverse relationship.

The overall pattern of relationship strongly suggests that the familial characteristics should be considered as consisting of two subsets -- one reflecting the family as a unit vis-a-vis the larger social system and the other focusing on intrafamilial processes. The latter, in particular, the mother's poor emotional and physical health, the father's ill health and lack of involvement in the family, and a quarrelsome conflictive relationship provide the emotional milieu in which delinquent behavior is most likely to develop. The former, that is, the family's isolation from the larger social group, its

lack of informal or formal contacts[17] and to some extent its exclusion from all forms of social participation predicts the eventual development of "social" problems and of the children's recruitment into criminal careers. "Unhappy Marriage" which basically lumps extreme personal and social dissatisfaction predicts both[18].

As part of the overall longitudinal study a profiling technique (using Hierarchical Cluster Analysis) was used so as to identify types of families. Nine demographic variables, eight parental-familial factors and five parent-child relationship factors (which will be discussed in detail later) were entered into the analysis. All variables were standardized so that none was differentially weighted by its variance. A given type had to present at least a .25 standard deviation unit discrepancy on a factor from the total sample mean for that factor to be included in the characterization. The resultant seven family types are presented in Table B 5 with their corresponding

---

17. The dimension underlying the factor "Isolated Parents"represents lack of personal-informal contact outside the home. The dimension labeled"Unleisurely Parents"represents lack of participation in any organized activity outside the home as well as lack of involvement in any activity which would reinforce one's social identification. List of items included in Appendix B.

18. This factor represents extreme marital and personal dissatisfaction as well as dissatisfaction with one's social position and antisocial behavior on the part of the father.

Table B 5

CHARACTERISTICS OF SEVEN H-FAMILY TYPES AND THE FREQUENCY OF DELINQUENT-CRIMINAL RECORDS; "MOST DELINQUENT" SCALE TYPE AND "MOST VIOLENT" SCALE TYPE FOR EACH

	White Affluent Discordant A	Black Low Status Traditional B	Single Parent and Child C	Spanish Low Status Traditional Cohesive D	Spanish Welfare E	Low Status Single Parent F	White Affluent Cohesive G	Total Sample
% White	98	5	44	27	3	57	100	57
% Black	1	95	21	--	15	28	--	14
% Spanish-speaking	1	--	34	73	82	15	--	29
Median Income	15,000	6,200	5,800	5,000	3,250	6,100	15,500	7,000
Median Monthly Rent	220	79	70	65	64	78	190	85
Median Years Mother's Education	13.9	10.8	10.1	7.9	5.5	10.5	13.5	10.9
% on Welfare A.F.D.C.	0	9.8	4.4	0.4	91.7	2.2	0	10.1
Median # Children	1.5	2.7	1.1	2.2	4.4	1.8	1.6	1.7
Median # Addresses New York City	1.5	1.6	1.5	1.8	2.5	1.5	1.4	1.5
% Mothers Employed	46.3	53.3	43.3	36.0	7.3	62.2	45.8	41.9
% Mothers Married	76.4	71.7	48.9	84.5	39.6	56.7	94.1	75.5
% Both Natural Parents	73.2	63.0	1.1	81.2	30.2	45.6	89.1	66.2
% Husbands Employed	100.0	92.4	94.4	93.7	84.4	90.0	99.7	95.0
% Always in Natural Mother's Care	95.9	89.1	1.1	95.4	83.3	90.0	99.0	86.2
% Jewish	44.7	--	12.2	--	--	8.9	44.4	20.3
% Protestant	22.8	73.9	25.6	7.9	14.6	25.6	17.8	22.1
% Catholic	18.7	22.8	53.3	87.9	83.3	60.0	26.0	49.8
% No Religion	13.8	3.3	8.9	4.2	2.1	5.6	11.8	7.7
Isolated Parents[a]	D,.29	E,.27	--	E,.26	E,.53	E,.36	D,.44	0.0
Unhappy Marriage	--	--	--	D,.31	E,.76	E,1.46	D,.51	0.0
Mother's Physical & Emotional Illness	--	D,.30	--	--	E,.86	E,.74	D,.53	0.0
Unleisurely Parents	D,.57	E,.25	--	E,.55	E,.72	E,.44	D,.69	0.0
Mother's Economic Dissatisfaction	--	--	--	--	E,.37	E,1.10	D,.48	0.0
Parents' Quarrels	E,1.03	--	D,.53	D,.40	D,.45	E,1.19	--	0.0
Husband Ill-Withdrawn	E,.45	--	--	--	--	E,.83	D,.26	0.0
Traditional Marriage	D,1.06	E,.44	--	E,.65	E,.28	--	D,.26	0.0
Parents Cold	E,.83	--	--	D,.44	--	E,1.14	D,.33	0.0
Mother Traditional-Restrictive	D,.76	--	--	E,.84	E,1.02	--	D,.80	0.0
Parents Punitive	--	E,.30	--	--	E,.43	--	--	0.0
Mother Supportive-Directing	E,.48	--	--	--	--	E,.33	--	0.0
Mother Excitable-Rejecting	E,1.13	--	--	D,.39	--	E,.71	--	0.0
% With Delinquent Criminal Record	4.5	33.3	17.3	13.7	28.1	23.1	3.4	13.3
% "most Delinquent"[b] scale type	10.1	11.7	7.7	6.0	9.4	18.5	4.3	7.9
% "most Violent" scale type	11.2	5.0	9.6	6.0	6.3	15.4	6.0	7.7

[a] All factor variables are standardized. E = Score Elevation (more of that dimension); D = Score Depression (less of that dimension.

[b] [illegible] scale and violence scale are standardized. "Most delinquent" category and "Most violent" categories are

frequencies of 1) delinquent-criminal record, 2) "most delinquent" as reported in interview, 3) "most violent" as reported in interview.

Table B 5 on page 41 will be analyzed in three stages. In the first stage we will focus on the distribution of delinquent criminal records among the various family types. It was indicated above that the best single predictors of official delinquent-criminal record (discounting racial-ethnic group and economic status) are the degree of isolation and lack of social-leisure time-participation in activities oriented toward the larger society. We have also noted earlier that the father's absence may account for greater pressure and social estrangement. The above distribution of delinquent criminal records reflects the effect of specifically such forces. The families typed as "Black Low Status Traditional" have a considerably more favorable average score on emotional intrafamilial variable when compared to the "Spanish Welfare" type or the racially mixed "Low Status Single Parents", yet they share with them an elevated score on "isolation" and "unleisurely parents". These three family types (B, E, and F) which present the highest frequencies of official records also have the lowest number of natural parents with the exception of family type C in which this characteristic is dominant. Family type C is indeed the next highest in terms of "official" delinquent criminal records.

The frequency of "most delinquent" types, with the exception of the "Black Traditional Family", reflects the impact of quarrelsome

parents and of the mother's poor emotional-physical health (see types A, E, and F). Both characteristics were identified above as predictors of delinquent behavior.

Interestingly enough, with the exception of the "White discordant families", delinquent-antisocial behavior as reported for the various family types is, although lower, consistent with their representation in officially known delinquency-criminality. The fact that the children from "White affluent discordant families" with a high rate of survey reported delinquency do not become official delinquents is yet to be explained. In part, the explanation may lie with a society which discriminates in their favor. It could also be that while equally disfunctional as members of society they are placed earlier and under closer supervision and treatment. Finally, it might be that while equally "active" as budding delinquents there is for them -- outside the home -- more incentive toward later social conformity. All of the above will be examined in future analyses identifying the various paths leading to antisocial behavior.

The relative frequency of "most violent" children in the various family types further emphasizes the effect of discordant-quarrelsome homes (see family type A and F). Children not raised by their natural parents and who have not been in the continuous care of their mother (Type C) also have a relatively high frequency in the "most violent" category.

In sum, the three measures of delinquent violent behavior indicate that children in the "Low Status Single Parent" family type

are both severely delinquent and highly violent. These children also exhibited the worst degree of emotional impairment at Time I. Children from the "Black Traditional" and "Spanish Welfare" family types have a high survey reported and police recorded rate of delinquency. They do not however have a high rate of "most violent" children. It remains to see whether the relative lack of violent behavior reported for them in the survey is reflected in the types of crime they engage in.

PARENT-CHILD RELATIONSHIP AND ANTISOCIAL BEHAVIOR

Parental affection and modes of discipline have long been the axes around which psychological explanations of aggressive antisocial behavior have revolved. Whether a frustration aggression model is employed or a more general psychoanalytic view which emphasizes the effect of emotional deprivation, there is almost complete unanimity regarding the relationship of parental coldness to aggressive criminal behavior on the part of the children.[19] Modes of discipline are to some extent more explicit and should thus be generally more accessible to documentation. The results however are less consistent. The Gluecks found that overstrict discipline is an important predictor of delinquency. McCord and McCord report that, given cold parents, a punitive but consistent discipline is less harmful than an erratic or a lax pattern of disciplining. L. Robins reports an even more extreme finding, namely, that children of cold, stern parents have a particularly low rate of antisocial behavior. It is assumed, however, that corporal punishment is excluded.

---

19. A. Bandura and R.H. Walters, Adolescent Aggression (N.Y. Ronald Press, 1959) emphasize the importance of cold rejecting fathers in the development of aggressive behavior. The literature on delinquents (primarily boys) either ascribes more importance to the mothers' cold, rejecting attitude or attributes equal importance to such behavior on the part of both father and mother. (For former see McCord, McCord and Zola op cit. pp. 104-123; for latter see F.I. Nye op cit. pp. 69-76).

The above noted studies of delinquent-antisocial behavior compared delinquents with controls in terms of emotional ties and patterns of discipline. A few, such as Nye, studied a sample of adolescents from the general population. Thus, in general, their conclusions identify parental behavior which is correlary with delinquency but do not clarify to what extent such attitudes and forms of behavior have long term, causal importance.

For the purposes of this study, 81 questionnaire items regarding the mother's and the father's attitudes as well as forms of interaction with the child were factor analyzed. Of the five factors, or dimensions, which were extracted, three focus on the mother's behavior and two involve both parents. In the following analysis Year I scores on these factors are examined for their relationship to delinquent and violent behavior five years later and to the adolescent's criminal record.

Overall, this set of independent variables plays a major role in explaining later antisocial-violent behavior. This is evident both from the fact that each dimension is related to one or more aspects of the dependent variable and from the strength of the correlations, some of which, individually, explain -- in spite of their longitudinal nature -- six percent of the variance in delinquent/criminal behavior.

Of the five dimensions of parent-child relationships, two ("Parents Cold" and "Mother Excitable-Rejecting") are related simultaneously to violent and to delinquent behavior as reported in the survey. Parental

coldness represents the father's (or father figure's) and the mother's lack of overt affection to the child; it involves a degree of resentment and indifference and is coupled with an attempt to avoid the child. The "Excitable-Rejecting" dimension stands for the mother's inconsistent manner in handling the child and her occasional outbursts of screaming as well as more direct forms of aggression. Interwoven in this dimension are the mother's ambivalence toward, and disappointment in the child (for list of items, see Appendix B). Both the indifference exhibited in the former dimension and the inconsistent but rejecting attitude characterizing the latter provide maximum grounds for the accumulation of frustration and, particularly at an early age, block the child's natural tendencies toward dependence.[20] It should be noted that when data collected at the same point in time is examined (Time II) an additional significant increment in the relationship is observed. Moreover, the specific deleterious effect is further clarified, namely, the greater relationship of "coldness" with delinquent behavior and of the "excitable" (given to aggressive outbursts) to violent behavior. When examined concurrently "coldness" alone accounts for over twelve percent of the variance in delinquent behavior (in its nonstandardized form "coldness" accounts for

---

20. For a discussion of the relationship between gratification of early dependency needs and the development of aggressive behavior, see A. Bandura and R. Walters, op. cit.

Table C 1

Relationship [a] of Five Parent-Child Dimensions with Violent-Behavior, Delinquent-Behavior and Delinquent/Criminal Record

	Parents Cold	Mother Traditional-Restrictive	Parents Punitive	Mother (Non-)Supportive-Directing	Mother Excitable-Rejecting
VIOLENCE SCALE	T_1 [b] r = .13 S.L. .001	T_1 r = (-).11 [c] S.L. .01	T_1 r = .15 S.L. .001	T_1 r = (-) .08 S.L. .001	T_1 r = .20 S.L. .001
	T_2 r = .23 S.L. .001	T_2 r = (-) .11 S.L. .01	T_2 r = .23 S.L. .001	T_2 r = (-) .10 S.L. .01	T_2 r = .32 S.L. .001
DELINQUENT-BEHAVIOR SCALE	T_1 r = .26 S.L. .001	T_1 r = .02 N.S.	T_1 r = .03 N.S.	T_1 r = .06 N.S.	T_1 r = .14 S.L. .001
	T_2 r = .35 S.L. .001	T_2 r = .02 N.S.	T_2 r = .04 N.S.	T_2 r = .14 S.L. .001	T_2 r = .23 S.L. .001
DELINQUENT CRIMINAL RECORD	T_1 r = .07 N.S.	T_1 r = .21 S.L. .001	T_1 r = .07 N.S. (X^2 is significant)	T_1 r = .14 S.L. .001	T_1 r = .05 N.S.
	T_2 r = .07 N.S.	T_2 r = .16 S.L. .001	T_2 r = .09 S.L. .01	T_2 r = .13 S.L. .001	T_2 r = .04 N.S.

(a) Pearson Product Moment Correlations.

(b) T_1 r = correlation between Time 1 score on parental behavior and Time 2 score on child behavior.

T_2 r = correlation between Time 2 score on parental behavior and on child behavior.

(c) (-) indicates an inverse relationship.

17% of the variance); "Excitability" accounts for over 10% of the variance in violent behavior. If these relationships had reached significance only in Time II there would have been place for speculation that they reflect the parents' reaction to their children's delinquent violent behavior. However, the stability of these predictors indicates their importance in forecasting such behavior as well as their relevance well beyond the "formative years".

A "punitive" treatment, which in this context represents severe physical punishment by mother and/or father as well as deprivation of privileges, is also highly significantly related to later violent behavior. As such, these results strongly demonstrate that when overt aggressive punishment is relied upon, it in turn is learned and employed in dealing with conflict situations. The data further indicate that such aggressive modes of "strictness" are related to official delinquency/criminality.

The dimension "Mother Traditional Restrictive" is inversely related to violent behavior and directly related to the acquisition of a delinquent criminal record. This dimension represents the mother's detachment from current information (and values) concerning children and youth. It also implies a lack of interest in any exchange concerning one's children. Along with this attitude is coupled an extremely repressive mode of handling one's children: they allow no sexual curiosity, never reason with child, view themselves as stricter than their own parents, and prefer their children to be "quiet and well

behaved". When the child does express frustration he meets with scolding and/or avoidance. A degree of detachment from current values regarding child rearing might be expected in some immigrant groups (particularly from "traditional" countries). When such detachment is associated with highly restrictive and somewhat repressive treatment it leads to the child's lack of identification with the parent and to the displacement of aggression.

Table C 2

Percentage of Study Children with/without Delinquent-Criminal Records by Mother Traditional-Restrictive

Mother Traditional Restrictive

Child's Delinquent/ Criminal Record	Low	Medium	High	N
No Record	95.3	84.7	78.8	635
Record	4.7	15.3	21.2	97
	N=276	N=215	N=241	

$X^2 = 31.5$ d.f. = 2 $p < .0001$

As indicated in Table C 2, when the continuous variable "Mother Traditional-Restrictive" is divided into three categories (low = up to half S.D. above the mean; Medium = between half S.D. below and above the mean; High = more than half S.D. below the mean -- lower scores represent more of this dimension) the relationship is linear.

In the overall factorial solution which encompassed 81 items dealing with parent-child relationships "Mother Traditional-Restrictive" and "Mother Supportive-Directive" were extracted as distinct, orthogonal factors. Yet in the analysis under discusssion Mother (Non-)Supportive-Directive and Mother Traditional-Restrictive present an identical pattern of relationship to violent, criminal behavior. The Supportive-Directive dimension represents the Mother's tendency to attend to the child's frustrations, they respond with a show of affection, distraction or verbal discussion. It also involves a degree of acceptance and an attempt to deal with the child's rebelliousness. As in the case of "Mother Restrictive" the 'non/supportive' mothers who repress the child's frustration seem to foster a displacement of the aggression. The fact that this dimension which is considerably less

Table C 3

Percentage of Study Children With/Without

Delinquent Criminal Records by Mother Supportive-Directing

Child's Delinquent/ Criminal Record	Mother Supportive-Directing		
	Low	Medium	High
No Record	82.8	87.1	92.0
Record	17.2	12.9	8.0

$X^2 = 8.14$ d.f. = 2 $p < .01$

related to cultural-ethnic differences is congruent with the effect of "Mother Traditional-Restrictive" indicates that, indeed, a major

impairment in the relationship with the mother is of crucial importance in the development of violent/criminal behavior. This should be emphasized inasmuch as studies of aggressive behavior have often stressed the importance of impairment of relationship with the father and have appeared to suggest that the mother-child relationship was at best accepting and at worst overly permissive.[21] In part, the importance of the mother's attitude and behavior surfaced in this study because of the large number of families in which the mother plays a major role. Given this situation, the mother's attitude and behavior are highly predictive of later violent behavior and of the child's delinquent criminal career.

---

21. See Bandura et al., op. cit.

CHILDHOOD ANTECEDENTS OF ANTISOCIAL BEHAVIOR

In order to abstract conceptually meaningfull and stable dimensions of child behavior, 221 items concerning child behavior from the Time I questionnaire were factor analyzed. The factorial solution identified 18 distinct dimensions of child behavior (See Appendix B). The basic common denominators, or early signals, of both later delinquency and violent behavior are "conflict with parents", "fighting", "conflict with sibs", "self-destructiveness", and "non-compulsivity" (see Table D 1). Fighting, conflict with sibs and, to some extent, conflict with parents are closely conceptually related to the phenomena which we are trying to predict. Nevertheless, the fact that Time I measures are so highly related to Time II delinquent-violent behavior indicates the stability of such behavior. The relationship found between "non-compulsivity" and, particularly, "self-destructive tendencies" with later violent-delinquent behavior is of prime importance in that it reveals early symptoms which are not at face value associated with later antisocial behavior. "Self-destructiveness", it appears, is a double edged knife associated also with violence toward others.

The dimensions which are related exclusively to later violent behavior are: "Sex Curiosity", "Regressive Anxiety", "Training Difficulties", "Demandingness", and "Repetitive Motor Behavior". While further analysis is necessary before the dynamics involved are identified, this clustering of predictors strongly suggests that

Table D 1

Product-moment Correlation of Time I
14 Child Behavior Factors to Later (Time II)
Violent Behavior, Delinquent Behavior and Delinquent-Criminal Record[a]

Child Behavior Factors

	Sex Curiosity	Self-Destructive Tendencies	Mentation Problems	Conflict with Parents	Dependent Unassertive	Regressive Anxiety	Non-Compulsive
Violence Scale	.27**	.23**	.09*	.30**	.06	.28**	.19**
Delinquent-Behavior Scale	.03	.13**	.10*	.35**	-.12**	.01	.19**
Delinquent-Criminal Record[b]	.10*	.02	.19**	.02	.06	.05	.08

	Training Difficulties	Undemanding	Repetitive Motor Behavior	Fighting	Delusions-Hallucinations	Delinquency	Conflict with Siblings
Violence Scale	.14**	.13**	.12**	.40**	.07	.01	.28**
Delinquent-Behavior Scale	.00	.02	.01	.29**	.14**	.38**	.15**
Delinquent-Criminal Record[b]	.02	.01	.02	.06	.08	.27**	.06

(a) Four dimensions were unrelated to any measure of the dependent variable.
(b) Covering a ten year period since Time I interview
* $p < .01$
** $p < .001$

that violent behavior is associated with early fears and deep-seated emotional conflicts.

Of the four factors associated with delinquent/criminal record, one, "Mentation Problems", should be emphasized. While in no way the only path to official delinquency, children with early mentation problems (e.g. difficulties with memory, concentration, speech, etc.) actually account for a considerable volume of known delinquency.

In the above analysis the most important social, familial and psychological predictors of delinquent and violent behavior have been reviewed. While there are several dominant predictors of antisocial behavior their interrelationship and their relative weight varies among subgroups of the population. It is therefore necessary to construct and test at least two major causal paths to account for the development of antisocial behavior. Violent behavior appears to be associated with a relatively distinct set of predictors and points to the importance of both early mother-child relationship and reinforcement by adult models.

APPENDIX A

Background Information on Sample

Table I

Number of Children in the Family by Income Level*
(In Percent)

Income	Number of Children: One	Two	Three/Four	Five or More	
Poverty (Under 4000)	11.4	23.6	43.1	22.0	100% (N = 123)
Lower Income (4000-7800)	17.8	30.8	33.0	18.5	100% (N = 276)
Middle Income (7800-10,500)	15.6	37.8	36.7	10.0	100% (N = 90)
Upper Middle Income (10,500-15,500)	28.2	44.9	23.1	3.8	100% (N = 78)
High Income (over 15,500)	20.6	49.1	28.5	1.8	100% (N = 165)

* As measured at time of first interview.

Appendix A (Continued)

Table II

Number of Children in the Family by

Racial-Ethnic Group Membership*

(In Percent)

	Number of Children				
	One	Two	Three/Four	Five or More	
White	22.7	43.0	29.8	4.5	100% (N = 440)
Black	16.8	14.7	37.9	30.5	100% (N = 95)
Spanish	8.6	31.0	38.1	22.3	100% (N = 197)

* Number of children as measured at time of first interview.

Table III

Income Level by Racial-Ethnic Group Membership*

(In Percent)

	Poverty (Under 4000)	Lower Income (4000-7800)	Middle Income (7800-10,500)	Upper Middle Income (10,500-15,500)	High Income (Over 15,500)	
White	3.4	30.0	13.4	16.1	37.0	100% (N = 440)
Black	40.0	38.9	13.7	5.3	2.1	100% (N = 95)
Spanish	35.5	54.3	9.1	1.0	0.0	100% (N = 197)

* Income level as measured at time of first interview.